

SELSATTM

English

SELSAT-H10D/H21D

User's manual



Flat Satellite Antenna
with
Dual Linear Polarization

www.self-sat.com

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SELSAT-H10D/H21D



Product introduction

What is SELFSAT-H10D/H21D?

SELSAT-H10D/H21D is a Horn Array Type Satellite Antenna with Dual Linear Polarization, it can receive signal from major Satellites and would replace a normal former Parabolic Dish. Small, discreet and easy to use, it can be installed in a few minutes and used as a portable antenna for all satellite receptions.

SELSAT-H10D/H21D can be used for both free to Air and encrypted (requiring a subscription with an operator) channel reception; it can also receive all High Definition channels with a superior image quality.

For the use and installation, please read the following instructions and installation materials carefully.

Do you have a TV's at home more than one?

**H10D2
/H21D2**



Built in Twin LNB output

H21D4



Built in Quad LNB output

Then, take SELFSAT built in multi LNB output

Watching 2 channels is possible through H10D2/H21D2

Even enjoying 4 channels is possible through H21D4

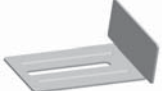
Safety Instructions

- Before using this product please read this manual carefully and follow exactly all installation, mounting & orientation instructions.
- All the instructions should be followed in order to avoid any technical problems.
- Any electric or magnetic field close to the SELFSAT-H10D/H21D may cause a bad reception or even cut off the signal completely.
- Do not drill the plastic cover of the antenna, which seals the antenna from moisture.
- Handle the antenna with care as any impact will cause damage to the electronics.
- Do not open the cover, any attempt to repair by a non-qualified person can be dangerous and void the warranty.
- Any obstacle (buildings, trees, etc....) will block the reception of the signal from the satellite to the antenna.
- Do not paint or add any substance on the antenna cover, this will block the reception of the signal from the satellite.
- The cable between the antenna and the Satellite receiver should not exceed 30m as it will decrease the quality of the signal.
- The use non- isolated jacks will result in a loss of the signal level.
- For an optimum signal reception please use the Attenuation Thin Pad for the first installation. (for more details, please refer to step 6)
- Do not forget to adjust the antenna and the bracket to the cross-polarity (skew angle please refer to step 5).
- Tighten all the screws of the antenna once you have finished the adjustments.
- This product contains one universal LNB, it is forbidden to add, change or modify the LNB.
- For more precise details on the above points or for any information, please ask your retailer or customer service.

Warning

Antennas improperly installed or installed to an inadequate structure are very susceptible to wind damage. This damage can be very serious or even life threatening. The owner and installer assumes full responsibility that the installation is structurally sound to support all loads (weight, wind & ice) and properly sealed against leaks. The manufacturer will not accept liability for any damage caused by a satellite system due to the many unknown variable applications.

Box Content

No	Symbol	Part name	Image	Quantity
1	A1	Antenna Body		1
2	P1	Attenuation PAD		1
3	B1	Angle Bracket		1
4	B2	Main Support		1
5	B3	Window Bracket A		1
6	B4	Window Bracket B		1
7	B5	Fix Bracket A		1
8	B6	Fix Bracket B		1
9	B7	Spanner		1

No	Symbol	Part name	Image	Quantity
10	C1	Compass		1
11	S1	Hex Bolt M4X10 SEMS2		4
12	S2	Hex Bolt M6x18 SEMS2		3
13	S3	Hex Bolt M6X50 SEMS2		1
14	S4	Round Head SquareNeck Bolt M6x30		1
15	S5	Round Head SquareNeck Bolt M6x50		3
16	S6	U-Bolt M6x85		2
17	N1	Flanged Nut M6		7
18	E1	Rubber		4

Install

How to Install?

By following the instructions step by step you can proceed easily to install SELFSAT-H10D/H21D by yourself or with the help of a professional antenna installer.

Before installing your antenna, you check that SELFSAT-H10D/H21D box contains all the items listed above in the 'Box Content'. In the event of any missing parts, please contact your distributor.

Step 1: Where to Install?

In order to receive a signal from the Satellite, SELFSAT-H10D/H21D is to be installed in an open loop space (outside the house or the apartment), in the direction of the satellite towards the equator, for which, you will need a compass to exactly orient SELFSAT-H10D/H21D toward the satellite (Note; please take reference to the table of the Azimuth angles specified in the back pages of this manual)



Note

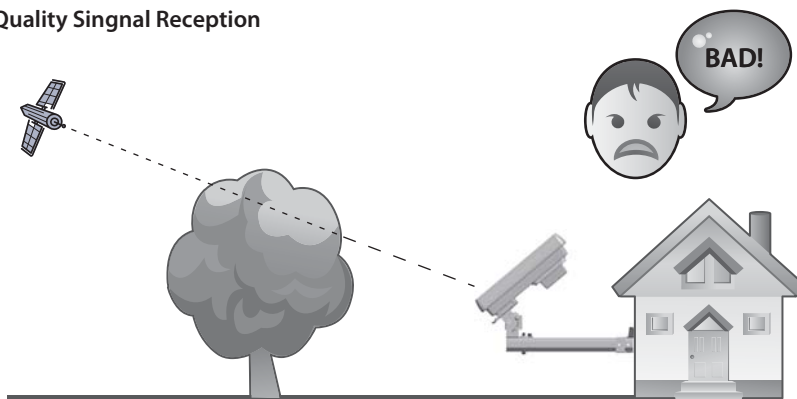
To ensure an accurate compass reading, stay away from large metal objects, specifically electrical cables and then make multiple readings

Make sure that there are no obstacles in front of SELFSAT-H10D/H21D which can decrease the signal reception quality, such as buildings, or trees (you may keep in mind that trees will grow and may block the signal).

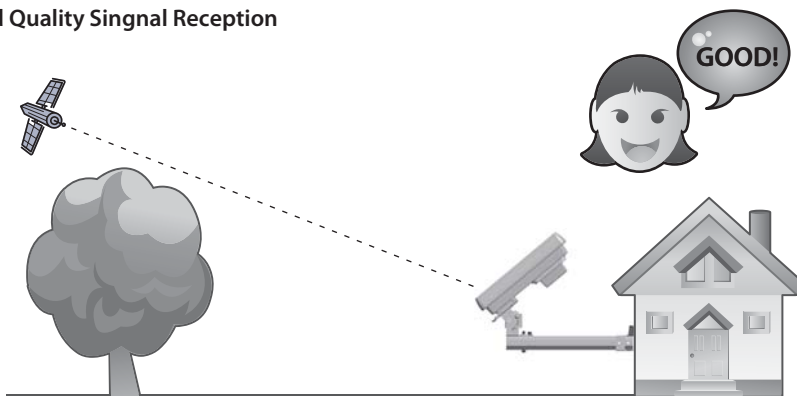
In order to be able to fix and install your antenna easily you might choose an easily accessible place without any potential danger for installation.

Think about the way you might pass your cable in a discreet way from the SELFSAT-H10D/H21D to your Set top Box. The antenna should not be too distant from your satellite receiver; a cable longer than 30 meters can decrease the quality of the signal.

Bad Quality Singnal Reception



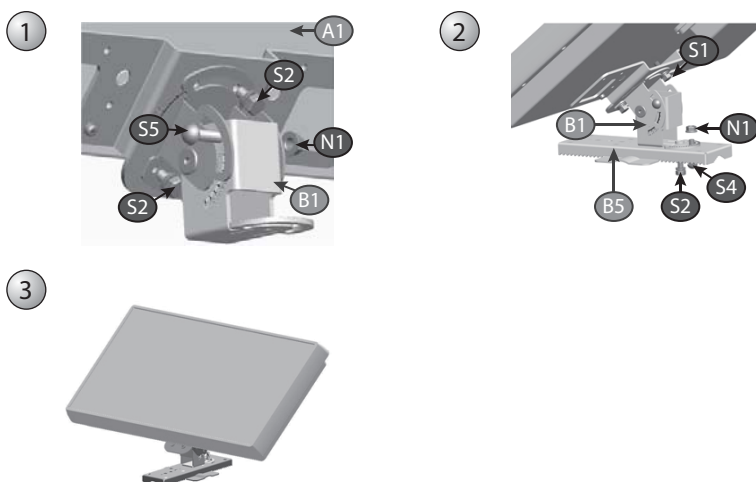
Good Quality Singnal Reception



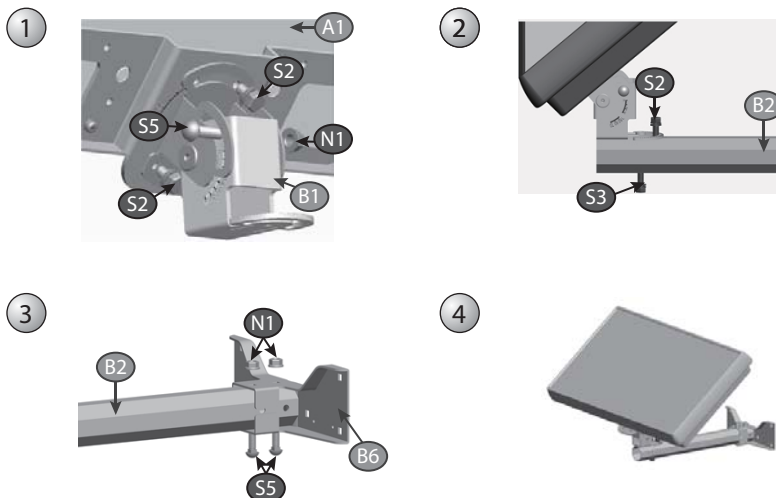
Step 2: Installation Choice

Depending on the choice of installation position for the SELFSAT-H10D/H21D, you can then decide on the mounting type, all parts are included.

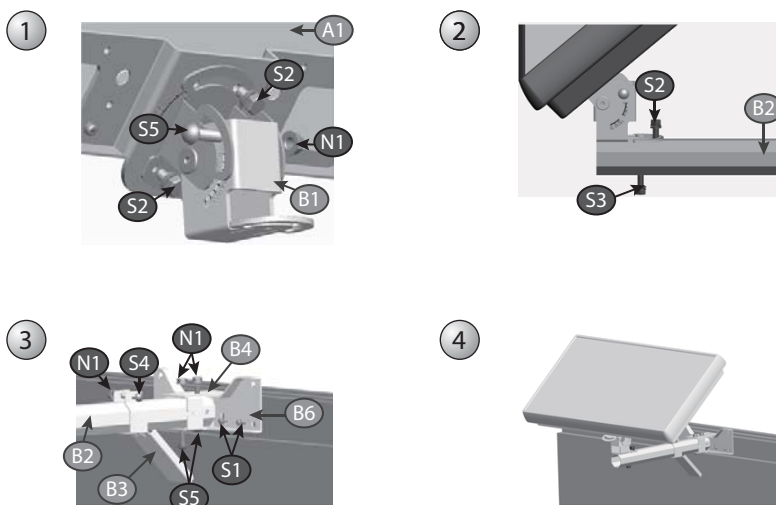
A) Table Stand Type (on a Horizontal Plain)



B) Wall Mounting Type



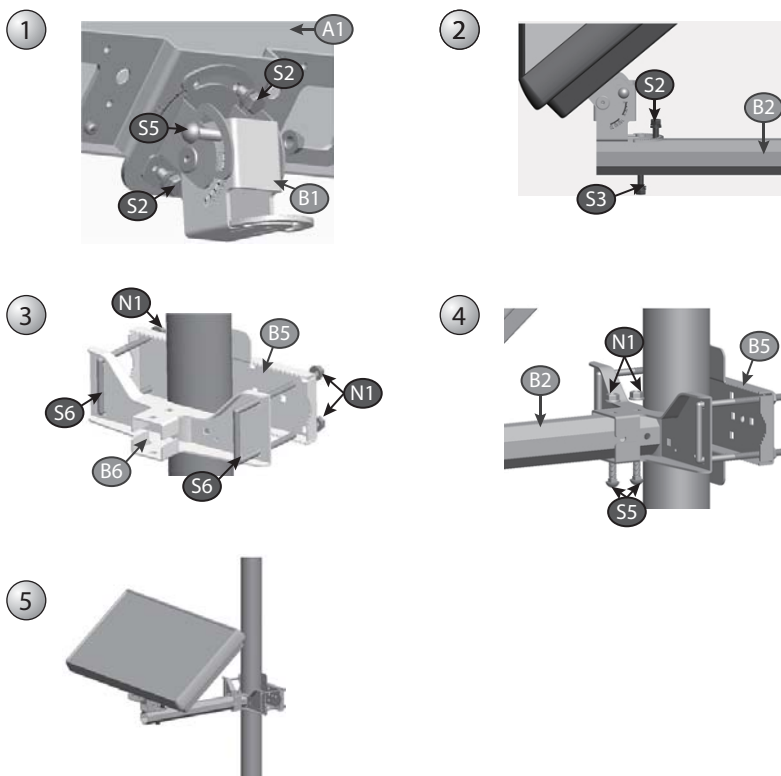
C) Window Type



Attention

Part number B6 bracket has 2 holes for H10D model & 4 holes for H21D model respectively.

D) Clamp on Balcony Type



Step 3: Connecting the Antenna and the Set top box

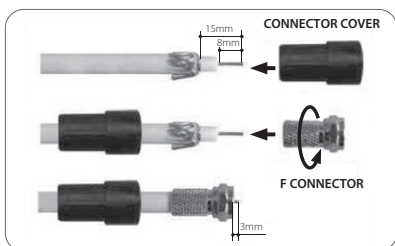
Once you have installed the antenna in an open loop space and mounted the way you want it to be the next step is to connect it all together.

In order to be able to watch your favorite satellite programs, you need to connect your satellite antenna to a receiver by a cable.

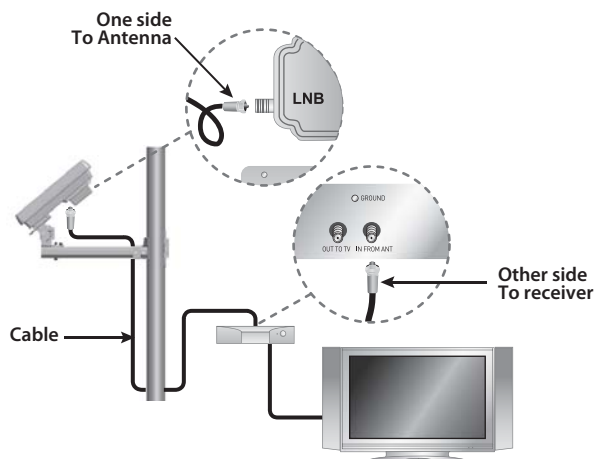
The cable between the antenna and the Satellite receiver should not exceed 30m as it will decrease the quality of the signal.

The use of a long or bad quality cable and not isolated jacks can cause a loss of the signal level, it would be preferable to use an RG6 Coaxial cable (HF 17VATC or 19VATC cable), in order to minimize a signal loss.

A) How to prepare the cable?



B) How to connect the cable to the antenna and the set top box?



It is important that the coaxial cable does not become damaged or Kinked during the installation procedure.

Step 4: Antenna Pointing Menu

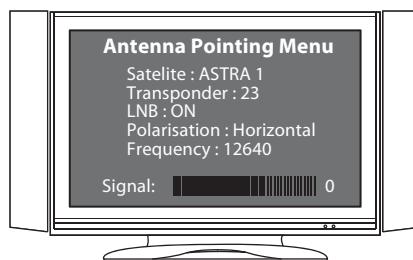
Once all connected, turn on the TV and the Satellite receiver.

Select the Antenna Pointing Menu on your set top box.

This image shows the Signal level and the screen you will see on your TV.

Do not forget to choose "LNB : ON"

You will need someone to stay in front of the TV to tell you when the signal is "good" while you're outside trying to adjust the antenna the best way possible.



Step 5: Pointing and locating the Signal (first without Attenuation Thin Pad)

Once all installed and connected, you may take off the Attenuation Thin Pad from the antenna (and keep to one side for step 6) and then start adjusting your antenna in order to receive a signal. For that, you will need to move your antenna in three different ways in order to receive the maximum signal level & best reception quality.

- A - Cross Polarisation Tilt: or Skew Angle is to tilt the antenna
- B - Elevation: Move your antenna vertically (Up/down)
- C - Azimuth: Turn antenna on a horizontal plain (left/right)

Whatever your choice of mount type, you will be able to adjust your antenna easily by following these instructions.

Note

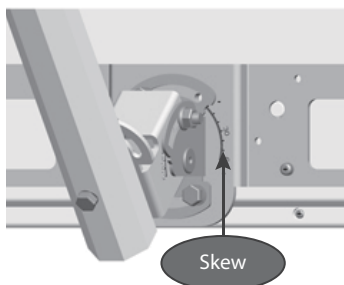
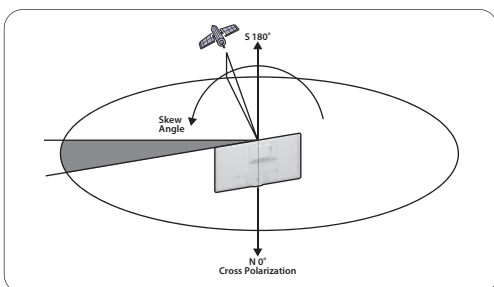
To adjust the antenna with precision and to allow a good reception (even in bad weather), professional installers use a "signal meter". This indicates the level of signal strength received. Only the use of this measuring device guarantees an optimum adjustment.

A) Cross Polarisation (Skew Angle) :

Obtain the Skew Angle of the chosen satellite, from the lists in this manual which cover many European countries & big cities),

Tilt your antenna to the specified degree by looking to the degree graduation located on the back of the antenna bracket.

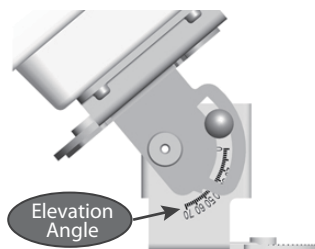
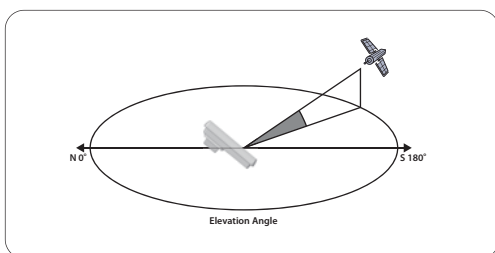
Once achieved, tighten both screws connecting the Angle Bracket (B1) to the Antenna Body (A1).



B) Elevation Angle :

Then obtain the Elevation angle according to the area location of the chosen satellite on the lists in this manual. Then move your antenna up or down according to the angle, (you may use the graduated surface of the bracket in order to make sure that you are on the right position. Once achieved, tighten your elevation nuts on the Angle Bracket (B1), this is a preliminary adjustment which you may have to fine tune later by using the pointing menu on the TV.

You may do a fine tuning for the elevation angle by following the peak signal level on your screen later on once all three points have been followed.



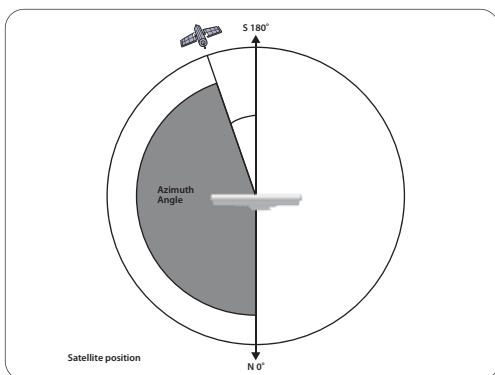
C) Azimuth :

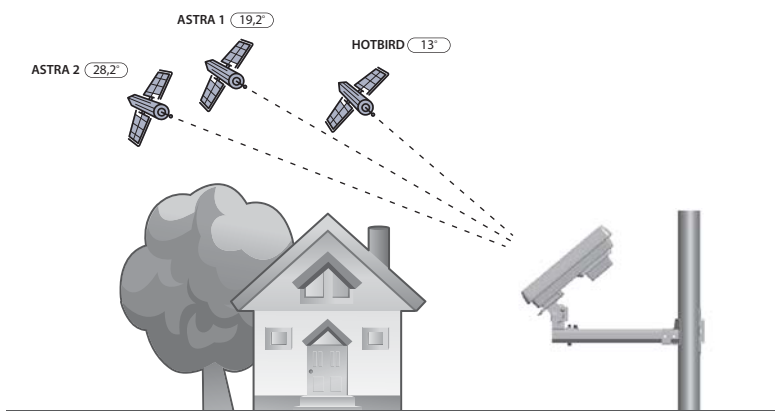
Finally obtain the area's azimuth angle of the chosen satellite, on the lists in this manual, Point the antenna in a generally southerly direction, then, by using the compass rotate to the right or the left towards south on your compass (180°).

All of the European satellites are located to the south, there will be a minor difference in the azimuth angle from one satellite to another.

Once you have selected the chosen satellite on your receiver follow the signal strength on the screen by fine tuning the azimuth and rotating the antenna very slowly "to the right" or "to the left" in order to receive the highest signal level from the satellite.

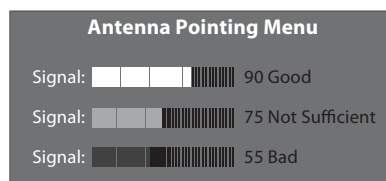
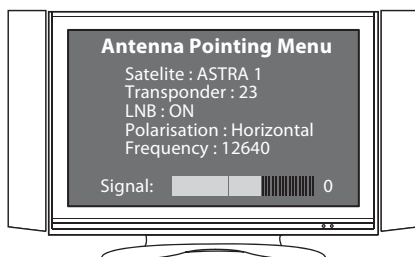
You should be able to find the satellite signal first and then the signal peak, indicated on your screen. Once you sweep through the peak-signal point on the screen, mark the position with a pencil and screw in your angle bracket to fix the antenna in this position.





The signal level and quality is indicated on the TV screen and will fluctuate and change colour according to the adjustment & movement of the antenna while you are pointing & finding (azimuth, elevation and Skew angle).

The level indicates the power of the signal and the colour is the signal reception quality from the chosen satellite.



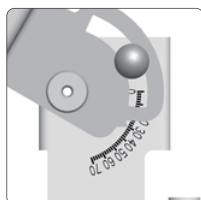
Once fine tuning is complete, and the signal is at its peak level with a good quality, you can stop adjusting the antenna.

(Example of pointing & finding the signal)

In order to watch Canal+ through ASTRA1(19.2 East) from the city 'Brest' of France, you will see Skew angle at -12.7, Elevation angle at 30, and Azimuth angle at 149.6 (in reference to the angle table on the back page of this manual)



< Skew >



< Elevation >



< Azimuth >



Step 6: Optimum Pointing & Finding the Signal (with Attenuation Thin Pad)

Use of Attenuation Thin Pad simulates bad weather conditions causing a signal loss and aids antenna positioning to receive an optimum signal in all weather conditions.

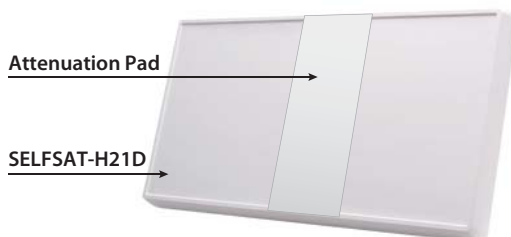
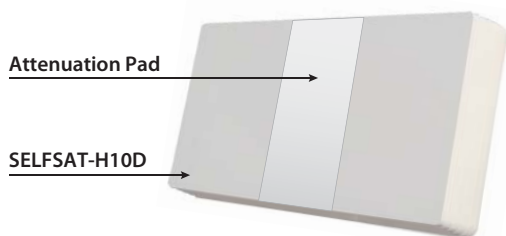
Optimum pointing and finding to gain the best signal is only possible after passing through step 5.

Please affix Attenuation Thin Pad back onto the face of antenna cover and you may start repeating to make adjustment of Skew angle, Azimuth, and Elevation as done the same in step 5, again to achieve the maximum and optimum signal level.

Once completed, remove the Attenuation Thin Pad (keep pad in a safe place to use in future for portable use) ensure that all the screws are well tightened to avoid the antenna moving position.

Note

During heavy cloud coverage or rainfall, the reception of signal level tends to weaken and in some cases the signal level will not be possible by the use of Attenuation Thin Pad. So during bad weather, you are recommended to skip step 6 for a use of Attenuation Thin Pad.



Keep this Pad for the First installation and Pointing

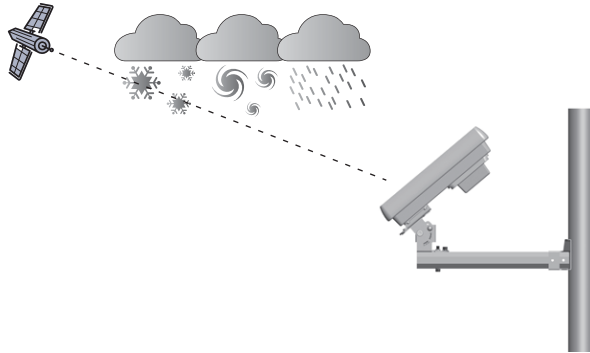
Troubleshooting Check List for Initial Installation

If the signal is not found, be sure the receiver user manual and the antenna user manual have been followed closely, check the following:

- ✓ Make sure all cable connections are correct and each connection is seated/tightened properly
- ✓ Inspect the inside of each cable connector for dirt or possible connector to case/shield short.
- ✓ Verify the Azimuth, Elevation and Tilt angles for your location by ZIP code.
- ✓ Make sure the Tilt and Elevation pointers are aligned correctly to the scales. Do not use washer or bolt as reference.
- ✓ Make sure the Tilt adjustment is not changed from the recommended setting for the antenna location.
- ✓ Remove existing TV-specific components, such as TV splitter, etc; reduce the installation to the basic connections called out in this guide. Such components may not work with the satellite signal and they may be in the wall where you can't see them. When in doubt. Run RG6 cable directly to your receiver
- ✓ Make sure there are no obstructions (trees, buildings, windows, corner or overhang of your roof, your body or hands) – the signal does not pass leaves, branches, glass, etc.
- ✓ RG 6 cable with solid copper center conductor is highly recommended because it has much lower DC voltage drop compared to RG 6 cable with a copper-coated, steel center conductor.
- ✓ Standard RG 59 cable causes too much DC drop and signal drop; it can not be used to pass the satellite signal. RG 6 coaxial cable must be used.
- ✓ Some after-market, off-the-shelf add-on components may not be as advertised. They might not work or could cause additional DC drops and signal amplitude attenuation. Remove such components. Go back to the basic connections called out in this manual and re-verify.
- ✓ Make sure the satellite cable is connected to the "Sat In" jack, not the "Antenna In" jack, The "Antenna In" jack at the back of the receiver is for off-air antenna input or cable TV input.
- ✓ If all are done correctly but the signal is still not found. Change the Elevation adjustment of the antenna slightly ($\pm 2^\circ$, then $\pm 4^\circ$ from the called-for setting) and repeat the procedure.
- ✓ Make sure the Access Card from your receiver is fully inserted into the Access Card slot and oriented correctly.

Loss of Signal / Rain Fade

- The satellite signal may be lost temporarily due to unusually heavy rainfall. An optimally aligned antenna, along with the shortest possible cable run, minimizes the chances of "rain fade."
- Make sure the antenna is mounted securely to prevent it from being blown out of alignment in a heavy wind.
- Heavy snow accumulation on the antenna may reduce the satellite signal strength, snow should be swept away as soon as possible.
- Tree foliage growth into antenna's line-of-sight to the satellite may result in gradual loss of picture.



Installation Using Long Cable

- For installations where the RG 6 cable runs from the receiver(s) to the LNB far exceeds 100 feet (150 feet or more), as encountered in a commercial or multi-dwelling building, you need to use an AC power booster module to bias the LNB.
- You will also need an additional RF signal amplifier to compensate the signal amplitude loss. Otherwise, your antenna and receiver may not work properly and be subject to frequent outages in adverse weather. Contact a professional concerning such installations.

Austria

Az = Azimuth El = Elevation Sk = Skew

		Türk sat 2A, 3A	Astra 2A-2D Euro bird 1	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird 6/7A/8	Atlantic bird 3	Hispa sat 1C,1D			Türk sat 2A, 3A	Astra 2A-2D Euro bird 1	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird 6/7A/8	Atlantic bird 3	Hispa sat 1C,1D
		42.0E	28.2E	19.2E	13.0E	5.0W	30.0W			42.0E	28.2E	19.2E	13.0E	5.0W	30.0W
Amstetten 14e9, 48n1	Az	145.4	162.3	174.2	182.5	205.9	233.2	Landeck 10e6, 47n2	Az	140.2	156.6	168.3	176.7	200.8	229.4
	El	28.8	33.3	34.6	34.7	31.5	20.1		El	27.8	33.1	35.2	35.8	33.7	23.1
	Sk	-22.2	-4.7	3.2	1.7	17.0	32.4		Sk	-25.8	-8.6	0.9	-2.2	14.0	30.8
Bad Ischl 13e6, 47n7	Az	143.9	160.7	172.5	180.9	204.5	232.2	Lienz 12e8, 46n8	Az	142.5	159.3	171.2	179.7	203.7	231.7
	El	28.7	33.4	34.9	35.2	32.3	21.0		El	29.1	34.1	35.8	36.2	33.4	22.1
	Sk	-23.4	-5.9	1.9	0.6	16.2	32.1		Sk	-24.6	-7.0	1.0	-0.2	16.0	32.5
Bludenz 9e8, 47n2	Az	139.4	155.6	167.3	175.7	199.9	228.7	Linz 14e3, 48n3	Az	144.9	161.7	173.5	181.7	205.1	232.6
	El	27.4	32.9	35.0	35.7	33.9	23.5		El	28.4	32.9	34.3	34.5	31.5	20.3
	Sk	-26.3	-9.3	-1.6	-3.0	13.3	30.7		Sk	-22.5	-5.1	2.7	1.2	16.4	31.9
Braunau 13e1, 48n3	Az	143.4	160.1	171.8	180.1	203.6	231.4	Loeben 15e1, 47n4	Az	145.4	162.4	174.4	182.8	206.4	233.7
	El	28.0	32.7	34.3	34.6	31.9	21.0		El	29.6	34.1	35.4	35.5	32.2	20.4
	Sk	-23.3	-6.1	1.6	0.1	15.5	31.3		Sk	-22.6	-4.8	3.2	1.9	17.5	33.1
Dornbirn 9e8, 47n4	Az	139.4	155.6	167.3	175.6	199.7	228.5	Ried 13e5, 48n2	Az	143.9	160.6	172.4	180.7	204.2	231.8
	El	27.2	32.6	34.7	35.4	33.6	23.4		El	28.2	32.8	34.4	34.6	31.8	20.8
	Sk	-26.1	-9.2	-1.5	-2.9	13.2	30.5		Sk	-23.1	-5.8	1.9	0.5	15.8	31.6
Ebensee 13e8, 47n8	Az	144.1	160.8	172.7	181.0	204.6	232.3	Rottenmann 14e4, 47n5	Az	144.6	161.5	173.5	181.9	205.5	233.0
	El	28.7	33.3	34.8	35.1	32.1	20.9		El	29.2	33.8	35.2	35.4	32.2	20.8
	Sk	-23.2	-5.7	2.1	0.7	16.3	32.1		Sk	-23.0	-5.3	2.6	1.3	16.9	32.7
Eisenstadt 16e5, 47n5	Az	147.1	164.3	176.3	184.7	208.1	235.0	Salzburg 13e1, 47n8	Az	143.3	159.9	171.7	180.1	203.7	231.6
	El	30.1	34.2	35.4	35.3	31.6	19.5		El	28.4	33.2	34.8	35.1	32.4	21.3
	Sk	-21.5	-3.5	4.5	3.2	18.6	33.6		Sk	-23.7	-6.3	1.5	0.1	15.7	31.8
Fohnsdorf 14e7, 47n2	Az	144.8	161.8	173.8	182.3	206.0	233.4	Scheibbs 15e2, 48n0	Az	145.7	162.7	174.6	182.9	206.3	233.5
	El	29.6	34.2	35.6	35.7	32.5	20.8		El	29.1	33.4	34.7	34.8	31.5	20.0
	Sk	-23.0	-5.2	2.8	1.6	17.3	33.1		Sk	-22.1	-5.6	2.5	2.0	17.3	32.6
Fürstenfeld 16e1, 47n1	Az	146.4	163.6	175.7	184.2	207.7	234.8	Spittal 13e5, 46n8	Az	143.3	160.2	172.2	180.7	204.7	232.5
	El	30.3	34.6	35.8	35.8	32.1	20.1		El	29.4	34.3	35.9	36.2	33.2	21.7
	Sk	-22.1	-17.7	-9.5	2.9	18.5	33.8		Sk	-24.1	-6.4	1.7	0.5	16.6	32.9
Gmunden 13e8, 47n9	Az	144.2	160.9	172.7	181.1	204.6	232.3	Stockerau 16e3, 48n3	Az	147.2	164.2	176.1	184.4	207.6	234.5
	El	28.6	33.2	34.7	35.0	32.0	20.8		El	29.3	33.4	34.5	34.5	30.9	19.2
	Sk	-23.1	-5.7	2.1	0.7	16.2	32.0		Sk	-21.1	-3.4	4.4	2.9	17.9	32.8
Innsbruck 11e4, 47n3	Az	141.2	157.7	169.5	177.8	201.9	230.2	Tauern 12e7, 47n3	Az	142.6	159.3	171.1	179.5	203.4	231.5
	El	28.1	33.2	35.1	35.6	33.3	22.6		El	28.7	33.6	35.3	35.7	33.0	21.9
	Sk	-25.2	-7.9	-0.1	-1.5	14.6	31.4		Sk	-24.3	-6.9	1.0	-0.3	15.7	32.0
Judenburg 14e6, 47n2	Az	144.8	161.8	173.8	182.2	205.9	233.4	Villach 13e9, 46n6	Az	143.6	160.6	172.7	181.2	205.2	232.9
	El	29.6	34.2	35.6	35.7	32.5	20.8		El	29.7	34.6	36.1	36.4	33.3	21.6
	Sk	-23.1	-5.3	2.8	1.5	17.3	33.0		Sk	-24.0	-6.2	2.0	0.9	17.0	33.3
Kapfenberg 15e3, 47n4	Az	145.7	162.7	174.7	183.1	206.7	233.9	Voitsberg 15e2, 47n1	Az	145.3	162.4	174.5	182.9	206.6	233.9
	El	29.6	34.1	35.4	35.5	32.0	20.3		El	29.9	34.4	35.8	35.9	32.4	20.6
	Sk	-22.5	-4.6	3.4	2.1	17.7	33.2		Sk	-22.7	-4.8	3.3	2.0	17.8	33.4
Kirchschlag 16e3, 47n5	Az	146.9	164.1	176.1	184.5	207.9	234.8	Wien 16e4, 48n2	Az	147.2	164.3	176.2	184.5	207.7	234.6
	El	30.0	34.2	35.4	35.3	31.6	19.6		El	29.4	33.5	34.6	34.6	30.9	19.2
	Sk	-21.7	-3.7	4.4	3.0	18.4	33.5		Sk	-21.1	-3.4	4.5	3.0	18.1	32.9
Kitzbühel 12e4, 47n5	Az	142.4	159.0	170.8	179.2	203.0	231.1								
	El	28.4	33.3	35.1	35.5	32.9	21.9								
	Sk	-24.4	-7.0	0.8	-0.6	15.3	31.7								

Note

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Az = Azimuth El = Elevation Sk = Skew

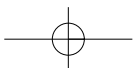
		Türk sat	Astra 2A-2D	Astra 1F-1H/ 2A-2D	Hot bird	Atlantic bird	Hipsa sat			Türk sat	Astra 2A-2D	Astra 1F-1H/ 2A-2D	Hot bird	Atlantic bird	Hipsa sat
		2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D			2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D
		42.0E	28.2E	19.2E	13.0E	5.0W	30.0W			42.0E	28.2E	19.2E	13.0E	5.0W	30.0W
Antwerpen 4e4, 51n2	Az	135.4	450.5	161.3	169.0	192.0	221.3	Hasselt 5e3, 50n9	Az	136.2	151.4	162.3	170.1	193.2	222.4
	El	21.7	27.3	29.7	30.8	30.7	23.1		El	22.3	27.8	30.3	31.3	30.9	23.0
	Sk	-26.1	-11.0	-4.6	-6.9	7.5	24.4		Sk	-25.9	-10.6	-1.1	-6.2	8.3	25.2
Arlon 5e8, 49n7	Az	136.2	151.6	162.7	170.6	194.0	223.4	Kortrijk 3e3, 50n8	Az	134.0	149.1	159.8	167.5	190.6	220.3
	El	23.5	29.1	31.6	32.6	32.1	23.7		El	21.4	27.2	29.9	31.1	31.3	23.9
	Sk	-26.6	-10.9	-4.1	-6.1	9.0	26.4		Sk	-27.0	-12.0	-5.6	-7.8	6.7	24.1
Bastogne 5e7, 50n0	Az	136.2	151.6	162.6	170.5	193.9	223.2	Leuven 4e7, 50n9	Az	135.5	150.7	161.6	169.4	192.4	221.7
	El	23.2	28.8	31.3	32.3	331.8	23.5		El	22.1	27.6	30.1	31.2	31.0	23.3
	Sk	-26.4	-10.8	-4.1	-6.1	8.9	26.1		Sk	-26.2	-11.0	-4.5	-6.7	7.8	24.8
Bergen 4e0, 50n5	Az	134.6	149.7	160.6	168.4	191.6	221.1	Lüttich 5e6, 50n6	Az	136.3	151.7	162.6	170.4	193.6	222.8
	El	22.0	27.8	30.4	31.6	31.6	23.9		El	22.7	28.2	30.6	31.6	31.1	23.1
	Sk	-26.9	-11.7	-5.2	-7.4	7.4	24.8		Sk	-26.0	-10.5	-3.9	-6.0	8.6	25.6
Brügge 3e2, 51n2	Az	134.1	149.2	159.8	167.5	190.5	220.0	Malmedy 6e0, 50n4	Az	136.7	152.1	163.1	170.9	194.2	223.3
	El	21.1	26.9	29.5	30.7	90.9	23.6		El	23.1	28.5	30.9	31.9	31.3	23.1
	Sk	-26.7	-11.8	-5.5	-7.8	6.5	23.8		Sk	-25.9	-10.4	-3.7	-5.8	9.0	25.9
Brüssel (Bruxelles) 4e4, 50n8	Az	135.1	150.4	161.2	169.0	192.0	221.4	Mecheln 4e5, 51n0	Az	135.4	150.5	161.3	169.1	192.1	221.5
	El	22.0	27.7	30.2	31.3	31.1	23.5		El	21.9	27.5	29.9	31.0	90.9	23.2
	Sk	-26.5	-11.2	-4.8	-7.0	7.6	24.7		Sk	-26.2	-11.0	-4.6	-6.8	7.6	24.6
Charleroi 4e5, 50n4	Az	135.1	150.3	161.1	169.0	192.2	221.7	Namur 4e9, 50n5	Az	135.5	150.8	161.7	169.5	192.7	22.1
	El	22.3	28.0	30.6	31.7	31.5	23.8		El	22.5	28.1	30.6	31.7	31.4	23.5
	Sk	-26.7	-11.4	-4.9	-7.0	7.8	25.1		Sk	3.8	-11.1	-4.5	-6.6	8.1	25.3
Eupen 6e0, 50n6	Az	136.8	152.2	163.1	171.0	194.1	223.2	Eende 2e9, 51n2	Az	133.8	148.8	159.5	167.1	190.1	219.7
	El	22.9	28.4	30.7	31.7	31.1	22.9		El	21.0	26.7	29.4	30.6	30.9	23.8
	Sk	-25.8	-10.2	-3.6	-5.7	8.9	25.8		Sk	-26.9	-12.0	-5.7	-8.0	6.3	23.6
Gent 3e7, 51n0	Az	134.6	149.6	160.4	168.1	191.1	220.6								
	El	21.5	27.2	29.8	30.9	31.0	23.6								
	Sk	-26.7	-11.6	-5.2	-7.5	7.0	24.2								

Note
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finder under Customer service.

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Az = Azimuth El = Elevation Sk = Skew

			Türk sat	Astra 2A-2D	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird	Atlantic bird	Hspa sat			Türk sat	Astra 2A-2D	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird	Atlantic bird	Hspa sat
			2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D			2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D
			42.0E	28.2E	19.2E	13.0E	5.0W	30.0W			42.0E	28.2E	19.2E	13.0E	5.0W	30.0W
Aachen 6e1, 50n8	Az	136.9	152.3	163.3	171.1	194.2	223.2		Frankfurt am Main 8e7, 50n1	Az	139.4	155.2	166.4	166.4	197.6	226.2
	El	22.8	28.2	30.5	31.5	30.9	22.7	El		24.5	29.6	31.7	31.7	31.1	22.0	
	Sk	-25.6	-10.1	-3.5	-5.6	8.9	25.7	Sk		-24.7	-8.6	-1.7	-1.7	11.2	27.6	
Aalen 10e1, 48n8	Az	140.4	156.5	168.0	176.2	199.7	228.2		Freising 11e8, 48n4	Az	142.1	158.5	170.1	170.1	201.9	230.0
	El	26.2	31.3	33.3	33.9	32.1	22.2	El		27.3	32.2	34.0	34.0	32.1	21.6	
	Sk	-24.8	-8.2	-0.9	-2.5	12.9	29.4	Sk		-24.1	-7.1	0.5	0.5	14.4	30.6	
Aschaffenburg 9e2, 50n0	Az	139.9	155.7	167.0	175.0	198.2	226.8		Göttingen 9e9, 51n5	Az	141.3	157.1	168.2	168.2	198.8	226.9
	El	24.8	29.9	31.9	32.6	31.2	21.9	El		23.9	28.6	30.4	30.4	29.4	20.4	
Augsburg 10e9, 48n4	Sk	-24.4	-8.3	-1.3	-3.2	11.7	27.9		Sk	-22.9	-7.0	-0.3	-0.3	11.6	27.0	
	Az	141.1	157.4	169.0	177.2	200.9	229.2	Hamburg 10e0, 53n6	Az	142.2	157.8	168.7	168.7	198.5	226.2	
	El	26.9	32.0	33.9	34.4	32.4	22.1		El	22.2	26.6	28.3	28.3	27.3	18.8	
Sk	-24.6	-7.8	-0.3	-1.9	13.7	30.2	Sk		-21.3	-6.0	0.3	0.3	10.8	25.4		
Bad Hersfeld 9e7, 50n9	Az	140.8	156.7	167.8	175.8	198.7	227.0	Heide 9e1, 54n2	Az	141.4	156.9	167.6	167.6	197.2	225.1	
	El	24.3	29.2	31.1	31.7	30.1	20.9		El	21.3	25.7	27.5	27.5	26.8	18.8	
	Sk	-23.5	-7.5	-0.6	-2.7	11.7	27.4		Sk	-21.4	-6.3	-0.2	-0.2	10.0	24.5	
Bad Homburg 8e6, 50n2	Az	139.4	155.2	166.3	174.3	197.5	226.1	Heidelberg 8e7, 49n4	Az	139.1	155.0	166.3	166.3	197.8	226.5	
	El	24.4	29.5	31.6	32.3	31.0	21.9		El	25.1	30.3	32.5	32.5	31.9	22.5	
Bad Neuenahr 7e1, 50n6	Sk	-24.6	-8.6	-1.7	-3.7	11.1	27.5	Sk	-25.2	-9.0	-1.9	-1.9	11.5	28.2		
	Az	137.9	153.5	164.5	172.4	195.5	224.4	Hof 11e9, 50n3	Az	143.0	159.2	170.6	170.6	201.6	229.4	
	El	23.5	28.8	31.0	31.8	31.0	22.4		El	25.7	30.3	31.9	31.9	30.2	20.2	
Sk	-25.2	-9.5	-2.8	-4.8	9.8	26.4	Sk		-22.6	-6.1	1.0	1.0	13.6	29.0		
Baden-Baden 8e2, 48n8	Az	138.4	154.2	165.6	173.7	197.4	226.3	Köln 7e0, 51n0	Az	137.9	153.4	164.4	164.4	195.2	224.1	
	El	25.4	30.8	33.1	33.9	32.6	23.2		El	23.1	28.3	30.5	30.5	30.6	22.2	
	Sk	-26.0	-9.7	-2.5	-4.2	11.3	28.4		Sk	-24.9	-9.3	-2.7	-2.7	9.6	26.0	
Bamberg 10e9, 49n9	Az	141.7	157.8	169.2	177.2	200.4	228.5	Lübeck 10e7, 53n9	Az	143.0	158.7	169.5	169.5	199.2	226.8	
	El	25.6	30.5	32.3	32.8	30.8	21.0		El	22.2	26.4	28.0	28.0	26.8	18.3	
Bergen 13e4, 54n4	Sk	-23.5	-7.1	0.8	-1.8	13.0	28.9	Sk	-20.8	-5.4	0.9	0.9	11.2	25.4		
	Az	146.2	162.0	172.9	180.5	202.3	229.3	München 11e6, 48n1	Az	141.7	158.1	169.8	169.8	201.8	230.0	
	El	22.7	26.5	27.7	27.9	25.7	16.7		El	27.4	32.4	34.2	34.2	32.4	21.9	
Sk	-18.9	-3.4	2.9	0.3	12.7	26.2	Sk		-24.4	-7.38	0.23	0.23	14.4	30.8		
Berlin 13e4, 52n5	Az	145.5	161.6	172.7	180.5	202.8	230.0	Münster 8e9, 49n9	Az	139.5	155.4	166.6	166.6	197.9	226.5	
	El	24.4	28.4	29.7	30.0	27.6	18.0		El	24.7	29.9	31.9	31.9	31.3	22.0	
	Sk	-20.2	-4.1	2.6	0.3	13.6	27.8		Sk	-24.7	-8.6	-1.6	-1.6	11.4	27.9	
Bingen 9e3, 48n1	Az	139.2	155.3	166.8	175.0	198.9	227.7	Nienburg 11e8, 51n8	Az	143.5	159.4	170.6	170.6	201.0	228.6	
	El	26.4	31.8	33.9	34.6	33.0	23.1		El	24.4	28.7	30.3	30.3	28.7	19.2	
Bonn 7e1, 50n7	Sk	-25.9	-9.2	-1.8	-3.3	12.5	29.6	Sk	-21.6	-5.5	1.2	1.2	12.8	27.7		
	Az	138.0	153.5	164.5	172.4	195.5	224.3	Offenburg 8e0, 48n5	Az	137.9	153.8	165.1	165.1	197.1	226.2	
	El	23.3	28.6	30.8	31.6	30.8	22.3		El	25.5	31.0	33.3	33.3	33.0	23.6	
Sk	-25.1	-9.4	-2.7	-4.8	9.7	26.3	Sk		-26.3	-10.0	-2.8	-2.8	11.3	28.6		
Bremen 8e8, 53n1	Az	140.7	156.2	167.1	174.8	197.1	225.2	Passau 13e5, 48n6	Az	144.1	160.7	172.4	172.4	204.0	231.7	
	El	22.1	26.8	28.6	29.2	28.0	19.7		El	27.9	32.5	34.0	34.0	31.5	20.6	
	Sk	-22.4	-7.0	-0.7	-3.2	10.2	25.2		Sk	-22.8	-5.6	2.0	2.0	15.6	31.3	
Chemnitz 12e9, 50n8	Az	144.3	160.6	171.9	179.9	202.6	230.2									
	El	25.7	30.0	31.5	31.8	29.4	19.4									
	Sk	-21.6	-5.2	-1.9	-0.1	14.1	29.0									



Italy

Az = Azimuth El = Elevation Sk = Skew

		Türk sat	Astra 2A-2D	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird	Atlantic bird	Hispa sat
		2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D
		42.0E	28.2E	19.2E	13.0E	5.0W	30.0W
Ancona 13e5, 43n6	Az	141.8	159.2	171.8	180.7	205.9	234.0
	El	32.2	37.6	39.4	39.8	36.4	23.7
	Sk	-21.6	-7.9	1.1	0.5	18.4	35.9
Arezzo 11e8, 43n5	Az	139.8	156.9	169.4	178.3	203.7	232.5
	El	31.5	37.2	39.3	39.9	37.1	24.9
	Sk	-27.9	-9.6	-0.7	-1.2	16.9	35.1
Asciano 11e5, 43n2	Az	139.3	156.4	168.9	177.9	203.4	232.3
	El	31.5	37.4	39.5	40.1	37.4	25.2
	Sk	-28.4	-10.0	-1.1	-1.6	16.8	35.2
Ascoli Piceno 13e6, 42n9	Az	141.5	159.0	171.7	180.8	206.3	234.4
	El	32.9	38.4	40.2	40.6	37.1	24.2
	Sk	-27.1	-8.2	1.0	0.6	18.9	36.6
Ascoli Satriano 15e5, 41n2	Az	142.9	161.2	174.4	183.8	209.6	237.1
	El	35.3	40.7	42.3	42.3	38.0	23.9
	Sk	-27.0	-7.1	2.8	2.9	21.8	39.2
Bari 16e9, 41n1	Az	144.5	163.1	176.5	185.9	211.4	238.4
	El	36.0	41.1	42.4	42.3	37.5	23.0
	Sk	-25.9	-5.7	4.3	4.4	23.2	39.9
Barletta 16e3, 41n3	Az	143.9	162.3	175.6	185.0	210.5	237.7
	El	35.5	40.7	42.2	42.1	37.5	23.3
	Sk	-26.3	-6.2	3.7	3.7	22.5	39.5
Bergamo 9e7, 45n7	Az	138.5	154.9	166.8	175.3	200.1	229.2
	El	28.5	34.3	36.6	37.3	35.4	24.6
	Sk	-27.5	-10.2	-2.2	-3.2	13.9	31.9
Bologna 11e3, 44n5	Az	139.8	156.6	168.8	177.6	202.7	231.4
	El	30.4	36.0	38.1	38.7	36.2	24.5
	Sk	-27.5	-9.5	-0.9	-1.7	15.9	33.9
Bolzano 11e3, 46n5	Az	140.7	157.3	169.2	177.7	202.0	230.5
	El	28.7	34.0	36.0	36.5	34.2	23.1
	Sk	-25.9	-8.4	-0.4	-1.6	14.9	32.1
Brescia 10e3, 45n5	Az	139.1	155.6	167.6	176.2	201.0	229.9
	El	29.0	34.7	36.9	37.6	35.5	24.4
	Sk	-27.3	-9.8	-1.6	-2.6	14.5	32.4
Cagliari 9e1, 39n3	Az	134.4	151.3	164.3	173.9	201.7	232.1
	El	33.3	40.4	43.4	44.4	42.3	29.4
	Sk	-33.6	-14.8	-5.1	-4.7	16.6	37.6
Carpi 10e9, 44n8	Az	139.4	156.1	168.3	177.0	202.0	230.8
	El	29.9	35.6	37.8	38.4	36.0	24.6
	Sk	-27.5	-8.8	1.2	1.4	15.4	33.4
Carrara 10e1, 44n1	Az	138.2	154.9	167.1	175.9	201.2	230.5
	El	30.1	36.1	38.4	39.1	37.0	25.5
	Sk	-28.6	-10.8	-2.3	-3.0	15.1	33.6
Catania 15e1, 37n5	Az	140.2	159.0	173.2	183.4	211.0	238.7
	El	38.2	44.4	46.3	46.5	41.7	26.3
	Sk	-30.	-9.5	1.6	2.7	24.1	42.7
La Spezia 9e8, 44n1	Az	137.9	154.5	166.7	175.5	200.8	230.1
	El	29.9	35.9	38.3	39.0	37.0	25.6
	Sk	-28.8	-11	-2.5	-3.3	14.8	33.5
Lecce 18e2, 40n3	Az	145.7	164.7	178.4	188.0	213.5	239.9
	El	37.3	42.2	43.4	43.1	37.6	22.5
	Sk	-25.5	-4.6	-5.8	6.1	24.9	41.3
Livorno 10e3, 43n5	Az	138.1	154.9	167.2	176.1	201.7	230.9
	El	30.6	36.7	39.1	39.8	37.5	25.8
	Sk	-29.0	-11.0	-2.3	-2.8	15.5	34.3
Milano 9e2, 45n5	Az	137.9	154.2	166.1	174.7	199.5	228.8
	El	28.5	34.4	36.8	37.5	35.8	25.1
	Sk	-28.0	-10.8	-2.7	-2.8	13.6	31.8
Napoli 14e3, 40n8	Az	141.2	159.2	172.5	181.9	208.1	236.1
	El	34.9	40.7	42.6	42.8	38.8	24.9
	Sk	-28.3	-8.6	1.3	1.5	21.0	39.0
Padova 11e6, 45n3	Az	140.5	157.2	169.4	178.0	202.8	231.3
	El	29.8	35.3	37.3	37.8	35.3	23.8
	Sk	-26.6	-8.8	-0.5	-1.4	15.8	33.3
Palermo 13e4, 38n1	Az	138.5	156.8	170.6	180.6	208.3	236.8
	El	36.7	43.2	45.4	45.8	41.8	27.1
	Sk	-31.4	-11.1	-0.4	0.5	21.9	41.2
Parma 10e3, 44n8	Az	138.8	155.4	167.5	176.2	201.3	230.3
	El	29.6	35.4	37.7	38.3	36.1	24.8
	Sk	-27.9	-10.2	-1.8	-2.7	14.9	33.1
Pavia 9e2, 45n2	Az	137.7	154.1	166.0	174.6	199.6	229.0
	El	28.7	34.7	37.1	37.9	36.1	25.3
	Sk	-28.3	-11.0	-2.8	-3.8	13.7	32.1
Pesaro 12e9, 43n9	Az	141.2	158.5	170.9	179.8	204.9	233.2
	El	31.6	37.1	39.0	39.4	36.3	23.9
	Sk	-26.8	-8.3	0.5	-0.1	17.7	35.3
Pescara 14e2, 42n5	Az	142.0	159.8	172.6	181.8	207.3	235.2
	El	33.5	39.0	40.7	41.0	37.2	24.0
	Sk	-27.0	-7.8	1.6	1.3	19.7	37.3
Piacenza 9e6, 45n0	Az	138.1	154.5	166.5	175.2	200.2	229.5
	El	29.1	35.0	37.3	38.1	36.2	25.2
	Sk	-28.2	-10.7	-2.5	-3.4	14.2	32.5
Pisa 10e4, 43n7	Az	138.3	155.1	167.3	176.2	201.7	230.9
	El	30.5	36.5	38.8	39.5	37.3	25.6
	Sk	-28.7	-10.7	-2.1	-2.7	15.5	34.2
Roma 12e5, 41n9	Az	139.7	157.2	170.0	179.3	205.3	233.9
	El	33.1	39.1	41.2	41.6	38.4	25.5
	Sk	-28.8	-9.8	-0.4	-0.6	18.5	37.0

Note

As for a city name missing in the table, you can visit to www.self-sat.com and find it from the column of Satellite finder under Customer service.

Luxembourg

Az = Azimuth El = Elevation Sk = Skew

		Türk sat	Astra 2A-2D	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird	Atlantic bird	Hispa sat
		2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D
		42.0E	28.2E	19.2E	13.0E	5.0W	30.0W
Differdange 5e9, 49n5	Az	136.2	151.7	162.7	170.7	194.2	223.6
	El	23.7	29.3	31.8	32.8	32.3	23.8
	Sk	-26.7	-11.0	-4.1	-6.0	9.2	26.6
Dudelange 6e1, 49n5	Az	136.4	151.9	163.0	170.9	194.5	223.8
	El	23.8	29.5	31.9	32.9	32.3	23.7
	Sk	-26.6	-10.9	4.0	-5.9	9.3	26.7
Esch 6e0, 49n5	Az	136.3	151.8	162.9	170.8	194.3	223.7
	El	23.7	29.4	31.8	32.8	32.2	23.7
	Sk	-26.7	-10.9	-4.0	-5.9	9.3	26.7
Ettelbruck 6e1, 49n8	Az	136.5	152.0	163.1	171.0	194.4	223.7
	El	23.6	29.2	31.6	32.5	31.9	23.5
	Sk	-26.4	-10.7	-3.9	-5.8	9.2	26.5

		Türk sat	Astra 2A-2D	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird	Atlantic bird	Hispa sat
		2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D
		42.0E	28.2E	19.2E	13.0E	5.0W	30.0W
Luxembourg 6e2, 49n6	Az	136.5	152.0	163.1	171.0	194.5	223.8
	El	23.7	29.3	31.8	32.7	32.1	23.6
	Sk	-26.5	-10.8	-3.9	-5.8	9.4	26.7
Petange 5e9, 49n6	Az	136.2	151.7	162.7	170.7	194.2	223.6
	El	23.7	29.3	31.8	32.8	32.2	23.8
	Sk	-26.6	-10.9	-4.1	-6.0	9.1	26.5
Remich 6e4, 49n6	Az	136.7	152.3	163.4	171.3	197.8	224.1
	El	23.9	29.5	31.9	32.8	32.2	23.5
	Sk	-26.4	-10.6	-3.7	-5.6	9.6	26.8

Note

As for an area not stated in the table, you can visit to www.self-sat.com and find it from the column of Satellite finder under Customer service.

Netherlands

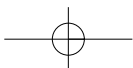
Az = Azimuth El = Elevation Sk = Skew

		Türk sat	Astra 2A-2D	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird	Atlantic bird	Hispa sat			Türk sat	Astra 2A-2D	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird	Atlantic bird	Hispa sat
		2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D			2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D
		42.0E	28.2E	19.2E	13.0E	5.0W	30.0W			42.0E	28.2E	19.2E	13.0E	5.0W	30.0W
Alkmar 4e7, 52n7	Az	136.2	151.3	162.0	169.6	192.1	221.0	Harlem 4e6, 52n4	Az	136.0	151.2	161.8	169.5	192.1	221.1
	El	20.7	26.0	28.3	29.3	29.1	21.8		El	20.9	26.2	28.6	29.6	29.4	22.1
	Sk	-24.8	-9.9	-3.8	-6.3	7.3	23.5		Sk	-25.1	-10.1	-4.0	-6.4	7.3	23.6
Almelo 6e7, 52n3	Az	138.2	153.5	164.3	172.1	194.7	223.3	Hoogeveen 6e5, 52n7	Az	138.1	153.4	164.2	171.8	194.3	222.9
	El	21.9	26.9	29.1	29.9	29.2	21.3		El	21.5	26.5	28.6	29.5	28.8	21.1
	Sk	-24.1	-8.8	-2.5	-4.9	8.9	24.8		Sk	-23.9	-8.7	-2.5	-4.9	8.6	24.4
Amsterdam 4e9, 52n4	Az	136.3	151.5	162.2	169.8	192.4	221.4	Leeuwarden 5e8, 53n2	Az	137.6	152.8	163.4	171.0	193.4	222.0
	El	21.1	26.3	28.7	29.7	29.4	22.0		El	20.8	25.8	28.0	28.9	28.4	21.0
	Sk	-24.9	-10.0	-3.8	-6.2	7.5	23.8		Sk	-23.8	-8.9	-2.8	-5.4	8.0	23.6
Apeldoorn 6e0, 52n2	Az	137.4	152.6	163.4	171.1	193.8	222.5	Maastricht 5e7, 50n8	Az	136.5	151.9	162.8	170.6	193.7	222.8
	El	21.6	26.8	29.0	29.9	29.4	21.7		El	22.6	28.1	30.4	31.4	31.0	22.9
	Sk	-24.5	-9.4	-3.1	-5.4	8.4	24.5		Sk	-25.8	-10.3	-3.8	-5.9	5.4	25.5
Arnhem 5e9, 52n0	Az	137.2	152.5	163.3	171.0	193.7	222.6	Nijmegen 5e9, 51n8	Az	137.1	152.4	163.2	171.0	193.7	222.6
	El	21.8	27.0	29.2	30.2	29.7	21.9		El	21.9	27.1	29.4	30.3	29.8	22.0
	Sk	-24.7	-9.5	-3.2	-5.5	8.4	24.6		Sk	24.9	-9.6	-3.3	-5.6	8.5	24.8
Breda 4e7, 51n6	Az	135.8	151.0	161.7	169.5	192.3	221.5	Roermond 6e0, 51n2	Az	137.0	152.4	163.3	171.0	194.0	223.0
	El	21.5	27.0	29.4	30.4	30.3	22.7		El	22.4	27.8	30.1	31.0	30.5	22.4
	Sk	-25.7	-10.5	-4.2	-6.5	7.6	24.3		Sk	-25.3	-9.9	-3.4	-5.6	8.7	25.3
Den Haag 4e3, 52n1	Az	135.6	150.7	161.4	169.0	191.7	220.8	Rotterdam 4e5, 51n9	Az	135.7	150.8	161.5	169.2	192.0	221.1
	El	21.0	26.4	28.9	29.8	29.8	22.5		El	21.2	26.6	29.0	30.1	30.0	22.5
	Sk	-25.5	-10.5	-4.3	-6.7	7.2	23.7		Sk	-25.5	-10.5	-4.3	-6.6	7.4	24.0
Eindhoven 5e5, 51n4	Az	136.6	151.9	162.7	170.4	193.3	22.4	Tilburg 5e1, 51n6	Az	136.2	151.4	162.2	169.9	192.8	221.9
	El	22.0	27.4	29.7	30.7	30.3	22.5		El	21.7	27.1	29.5	30.5	30.2	22.6
	Sk	-24.6	-10.1	-3.7	-5.9	8.0	24.1		Sk	-25.5	-10.3	4.0	-6.2	7.9	24.5
Emmen 6e9, 52n8	Az	138.6	153.9	164.7	172.4	194.8	223.3	Utrecht 5e1, 52n1	Az	136.4	151.6	162.4	170.0	192.7	221.7
	El	21.6	26.5	28.6	29.4	28.7	20.8		El	21.3	26.7	29.0	30.0	29.7	22.1
	Sk	-23.6	-8.4	-2.2	-4.6	8.9	24.5		Sk	-25.1	-10.0	-3.8	-6.1	7.8	24.1
Enschede 6e9, 52n2	Az	138.4	153.8	164.6	172.3	195.0	223.5	Venlo 6e2, 51n3	Az	137.3	152.6	163.5	171.3	194.2	223.2
	El	22.0	27.1	29.2	30.0	29.3	21.2		El	22.4	27.8	30.0	30.9	30.3	22.3
	Sk	-24.0	-8.7	-2.4	-4.7	9.1	25.0		Sk	-25.1	-9.7	-3.2	-5.4	8.8	25.3
Groningen 6e6, 53n2	Az	138.4	153.7	164.4	172.0	194.4	22.8	Warden 5e8, 53n1	Az	137.5	152.7	163.4	171.0	193.4	222.0
	El	21.1	26.1	28.1	28.9	28.3	20.6		El	20.9	25.9	28.1	29.0	28.5	21.0
	Sk	-23.4	-8.4	-2.3	-4.8	8.6	24.0		Sk	-23.9	-9.0	-2.9	-5.4	8.0	23.7

Note

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Switzerland

Az = Azimuth El = Elevation Sk = Skew

		Türk sat	Astra 2A-2D	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird	Atlantic bird	Hispa sat			Türk sat	Astra 2A-2D	Astra 1F-1H/ 1KR/1L/ 1M	Hot bird	Atlantic bird	Hispa sat
		2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D			2A, 3A	Euro bird 1	1KR/1L/ 1M	6/7A/8	3	1C,1D
		42.0E	28.2E	19.2E	13.0E	5.0W	30.0W			42.0E	28.2E	19.2E	13.0E	5.0W	30.0W
Basel 7e6, 47n6	Az	137.1	153.0	164.5	172.7	196.9	226.2	Locarno 8e8, 46n2	Az	137.8	154.0	165.7	174.2	198.8	228.1
	El	26.0	31.8	34.2	35.1	34.0	24.4		El	27.7	33.6	35.9	36.7	35.2	24.8
	Sk	-27.3	-10.8	-3.4	-4.9	11.3	29.1		Sk	-27.7	-10.7	-2.8	-4.0	12.9	31.0
Bern 7e4, 47n0	Az	136.7	152.6	164.1	172.4	196.8	226.3	Luzern 7e9, 47n0	Az	137.2	153.2	164.7	173.1	197.4	226.8
	El	26.4	32.3	34.8	35.8	34.7	25.0		El	26.6	32.4	34.8	35.7	34.5	24.6
	Sk	-27.9	-11.3	-3.8	-5.2	11.3	29.5		Sk	-27.6	-10.9	-3.4	-4.7	11.8	29.8
Biel 8e2, 46n5	Az	137.3	153.4	165.0	173.4	198.0	227.4	Sankt Gallen 9e4, 47n4	Az	139.0	155.2	166.8	175.1	199.2	228.1
	El	27.2	33.1	35.5	36.4	35.0	24.9		El	27.0	32.5	34.7	35.4	33.7	23.6
	Sk	-27.8	-11.0	-3.3	-4.5	12.2	30.4		Sk	-26.4	-9.5	-1.9	-3.3	12.9	30.3
Genf 6e2, 46n2	Az	135.0	150.7	162.2	170.6	195.3	225.3	Thun 7e6, 46n8	Az	136.8	152.8	164.3	172.7	197.1	226.6
	El	26.3	32.6	35.3	36.4	35.7	26.2		El	26.7	32.6	35.0	36.0	34.8	25.0
	Sk	-29.3	-12.8	-5.2	-6.5	10.6	29.5		Sk	-28.0	-11.3	-3.7	-5.1	11.6	29.8
Köniz 7e4, 46n9	Az	136.7	152.5	164.1	172.4	196.8	226.3	Winterthur 8e8, 47n5	Az	138.4	154.4	166.0	174.2	198.4	227.4
	El	26.4	32.3	34.8	35.8	34.7	25.0		El	26.6	32.2	34.5	35.3	33.8	23.9
	Sk	-28.0	-11.4	-3.8	-5.2	11.4	29.6		Sk	-26.7	-9.9	-2.4	-3.8	12.3	29.9
Lausanne 6e7, 46n5	Az	135.7	151.4	162.9	171.3	195.9	225.7	Zürich 8e6, 47n4	Az	138.1	154.1	165.7	174.0	198.1	227.3
	El	26.4	32.5	35.1	36.1	35.3	25.7		El	26.6	32.3	34.6	35.4	34.0	24.0
	Sk	-28.7	-12.2	-4.6	-6.0	10.9	29.6		Sk	29.8	-10.1	-2.6	-4.0	12.2	29.8

Note

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Denmark

Az = Azimuth El = Elevation Sk = Skew

		Astra 2A-2D	Astra 1E/3A	Astra 1F-1H/ 1KR/1L/ 1M	Eutelsat W2	Hotbird 6/7A/8	Eutelsat W1	Eutelsat W3A	Sirius 4	Thor 3/5 Intelsat 10-02	Atlantic bird 3	Hispasat 1C,1D
		28.2E	23.5 E	19.2E	16.0E	13.0W	10.0W	7.0E	5.0E	1.0W	5.0W	30.0 W
Alborg 9e9, 57n1	Az	158.5	163.9	169.0	172.8	176.3	179.9	183.5	187.0	193.0	197.6	224.9
	El	23.1	23.9	24.6	24.9	25.0	25.1	25.0	24.8	24.4	23.8	16.3
	Sk	-4.5	-1.7	1.0	-3.9	-2.0	-0.1	1.9	3.8	7.0	9.4	22.5
Arhus 10e2, 56n2	Az	158.7	164.1	169.2	173.0	176.7	180.3	183.9	187.5	193.4	198.1	225.5
	El	24.1	24.9	25.5	25.8	26.0	26.0	26.0	25.7	25.3	24.6	16.9
	Sk	-4.7	-1.8	1.0	-3.9	-1.9	0.1	2.1	4.1	7.4	10.0	23.4
Esbjerg 8e5, 55n5	Az	156.5	162.0	167.0	170.9	174.5	178.1	181.8	185.5	191.4	196.2	224.0
	El	24.3	25.3	26.0	26.4	26.7	26.8	26.8	26.6	26.2	25.6	18.1
	Sk	-6.1	-3.1	-0.3	-5.1	-3.1	-1.0	1.0	3.1	6.5	9.1	23.2
Helsingor 12e6, 56n1	Az	161.4	166.9	172.1	175.9	179.6	183.2	186.8	190.3	196.3	201.0	228.0
	El	24.7	25.4	25.9	26.1	26.2	26.1	26.0	25.6	25.0	24.2	15.9
	Sk	-3.2	-0.2	2.6	-2.3	-0.3	1.8	3.8	5.7	9.0	11.5	24.5
Horsens 10e1, 57n1	Az	158.8	164.2	169.2	173.0	176.6	180.1	183.7	187.3	193.2	197.8	225.1
	El	23.1	24.0	24.5	24.8	25.0	25.0	25.0	24.8	24.3	23.7	16.2
	Sk	-4.4	-1.5	1.2	-3.8	-1.9	0.1	2.0	3.9	7.1	9.6	22.6
Kobenhavn (Kopenhagen) 12e6, 55n7	Az	161.3	166.9	172.0	175.8	179.5	183.1	186.7	190.4	196.3	201.0	228.0
	El	25.0	25.8	26.3	26.5	26.6	26.5	26.4	26.1	25.4	24.6	16.2
	Sk	-3.4	-0.4	2.5	-2.3	-0.3	1.8	3.8	5.8	9.1	11.7	24.8
Kolding 9e5, 55n5	Az	157.7	163.2	168.3	172.1	175.8	179.4	183.0	186.7	192.7	197.4	225.0
	El	24.6	25.5	26.2	26.5	26.7	26.8	26.7	26.5	26.1	25.4	17.7
	Sk	-5.4	-2.4	0.4	-4.5	-2.4	-0.3	1.7	3.8	7.1	9.8	23.6
Odense 10e4, 55n4	Az	158.7	164.2	169.4	173.2	176.9	180.5	184.1	187.8	193.8	198.5	226.0
	El	24.9	25.8	26.4	26.7	26.8	26.9	26.8	26.6	26.0	25.3	17.3
	Sk	-4.9	-1.9	1.0	-3.9	-1.8	0.3	2.3	4.4	7.8	10.4	24.1
Randers 10e1, 56n5	Az	158.5	164.1	169.1	172.9	176.5	180.1	183.7	187.3	193.2	197.9	225.2
	El	23.7	24.6	25.2	25.5	25.7	25.7	25.7	25.4	25.0	24.3	16.7
	Sk	-4.7	-1.7	1.0	-3.9	-1.9	0.1	2.1	4.0	7.3	9.8	23.1
Roskilde 12e, 55n7	Az	160.8	166.3	171.4	175.3	178.9	182.6	186.2	189.8	195.8	200.5	227.6
	El	25.0	25.7	26.3	26.5	26.6	26.6	26.4	26.1	25.5	24.8	16.4
	Sk	-3.7	-0.7	2.2	-2.7	-0.6	1.4	3.5	5.5	8.8	11.3	24.6
Vejle 9e6, 55n7	Az	157.8	163.3	168.4	172.2	175.8	179.5	183.1	186.8	192.7	197.4	225.0
	El	24.3	25.3	25.9	26.3	26.4	26.5	26.5	26.3	25.8	25.2	17.5
	Sk	-5.3	-2.3	0.5	-4.4	-2.3	-0.3	1.8	3.8	7.2	9.8	23.5

Note

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Finland

Az = Azimuth El = Elevation Sk = Skew

		Astra 2A-2D	Astra 1E/3A	Astra 1F-1H/ 1KR/1L/ 1M	Eutelsat W2	Hotbird 6/7A/8	Eutelsat W1	Eutelsat W3A	Sirius 4	Thor 3/5	Atlantic bird 3	Hispasat 1C,1D
		Euro bird 1								Intelsat 10-02		
		28.2E	23.5 E	19.2E	16.0E	13.0W	10.0W	7.0E	5.0E	1.0W	5.0W	30.0 W
Espoo 24e7, 60n2	Az	176.0	181.4	186.3	190.0	193.4	196.8	200.2	203.5	209.0	213.3	238.4
	El	21.7	21.7	21.6	21.3	21.1	20.6	20.1	19.5	18.4	17.3	8.1
	Sk	5.0	7.7	10.2	5.0	6.6	8.3	9.9	11.4	14.0	15.8	25.1
Helsinki 25e0, 60n1	Az	176.3	181.7	186.7	190.4	193.8	197.2	200.5	203.9	209.4	213.7	238.7
	El	21.8	21.8	21.6	21.4	21.0	20.6	20.1	19.5	18.3	17.3	8.0
	Sk	5.1	7.9	10.3	5.1	6.8	8.5	10.1	11.6	14.2	16.0	25.2
Jyväskylä 25e8, 62n3	Az	177.3	182.6	187.5	191.1	194.4	197.8	201.1	204.3	209.7	214.0	239.0
	El	19.5	19.5	19.3	19.1	18.8	18.4	17.9	17.3	16.2	15.2	6.5
	Sk	5.8	8.2	10.5	5.1	6.6	8.1	9.6	11.0	13.3	15.1	23.5
Kotka 26e9, 60n4	Az	178.5	183.9	188.9	192.5	195.9	199.3	202.6	205.9	211.3	215.6	240.5
	El	21.5	21.5	21.2	20.9	20.5	20.0	19.5	18.8	17.6	16.4	7.0
	Sk	6.3	8.9	11.4	6.1	7.8	9.4	10.9	12.5	14.9	16.7	25.5
Kuopio 27e7, 62n9	Az	179.4	184.7	189.5	193.1	196.4	199.7	203.0	206.3	211.6	215.8	240.6
	El	18.9	18.8	18.6	18.3	17.9	17.4	16.9	16.3	15.2	14.1	5.5
	Sk	6.7	9.2	11.3	5.9	7.4	8.8	10.3	11.6	13.8	15.5	23.4
Lahti 25e7, 61n0	Az	177.1	182.5	187.4	191.0	194.4	197.8	201.1	203.7	209.9	214.1	239.1
	El	20.9	20.9	20.7	20.4	20.1	19.7	19.1	14.7	17.4	16.3	7.3
	Sk	5.6	8.2	10.6	5.3	7.0	8.5	10.1	9.8	14.0	15.8	24.6
Oulu 25e4, 65n0	Az	176.9	182.1	186.9	190.4	193.7	196.9	200.2	203.4	208.7	213.0	238.0
	El	16.7	16.7	16.5	16.3	16.0	15.7	15.3	14.8	13.8	12.9	5.2
	Sk	5.7	7.9	9.9	4.4	5.7	7.1	8.4	9.7	11.7	13.3	21.0
Pori 21e8, 61n5	Az	172.7	178.1	183.0	186.5	189.9	193.3	196.7	200.1	205.5	209.8	235.3
	El	20.2	20.3	20.3	20.2	20.0	19.7	19.3	18.8	17.9	16.9	8.6
	Sk	3.5	6.1	8.4	3.1	4.8	6.3	7.9	9.4	11.9	13.8	23.1
Tampere 23e8, 61n5	Az	174.9	180.3	185.2	188.8	192.2	195.6	198.9	202.3	207.7	212.0	237.2
	El	20.2	20.4	20.2	20.0	19.8	19.4	18.9	18.4	17.4	16.4	7.8
	Sk	4.6	7.2	9.5	4.2	5.8	7.4	8.9	10.4	12.8	14.7	23.7
Turku 22e3, 60n5	Az	173.2	178.6	183.5	187.2	190.6	194.0	197.4	200.8	206.3	210.6	236.0
	El	21.3	21.4	21.4	21.3	21.0	20.7	20.3	19.7	18.7	17.7	9.0
	Sk	3.6	6.3	8.7	3.6	5.2	6.9	8.5	10.1	12.6	14.6	24.1
Vantaa 25e0, 60n3	Az	176.3	181.7	186.6	190.3	193.7	197.1	200.5	203.8	209.3	213.6	238.6
	El	21.6	21.6	21.5	21.2	20.9	20.5	19.9	19.4	18.2	17.1	7.9
	Sk	5.2	7.9	10.3	5.1	6.8	8.4	10.0	11.6	14.0	15.9	25.0

Note

As for an area not stated in the table, you can visit to www.self-sat.com and find it from the column of Satellite finder under Customer service.

Norway

Az = Azimuth El = Elevation Sk = Skew

		Astra 2A-2D	Astra 1E/3A	Astra 1F-1H/ 1KR/1L/ 1M	Eutelsat W2	Hotbird 6/7A/8	Eutelsat W1	Eutelsat W3A	Sirius 4	Thor 3/5 Intelsat 10-02	Atlantic bird 3	Hispasat 1C,1D
		Euro bird 1										
		28.2E	23.5 E	19.2E	16.0E	13.0W	10.0W	7.0E	5.0E	1.0W	5.0W	30.0 W
Bergen 5e3, 60n4	Az	154.1	159.3	164.1	167.8	171.2	174.6	178.1	181.5	187.3	191.8	219.2
	El	18.9	19.8	20.5	20.9	21.2	21.4	21.5	21.5	21.3	21.0	15.4
	Sk	-5.5	-3.1	-0.8	-6.0	-4.4	-2.7	-1.0	0.7	3.6	5.8	18.2
Drammen 10e3, 59n8	Az	159.4	164.8	169.7	173.4	176.8	180.3	183.8	187.3	193.0	197.5	224.4
	El	20.5	21.2	21.8	22.0	22.2	22.2	22.2	21.9	21.5	21.0	14.2
	Sk	-3.2	-0.6	1.8	-3.3	-1.6	0.2	1.9	3.7	6.5	8.7	20.6
Kristiansand 8e0, 58n1	Az	156.6	161.9	166.9	170.6	174.1	177.7	181.2	184.7	190.6	195.2	222.6
	El	21.6	22.6	23.2	23.6	23.8	23.9	23.9	23.9	23.5	23.0	16.2
	Sk	-5.1	-2.4	0.1	-5.0	-3.1	-1.2	0.6	2.5	5.6	8.0	21.0
Oslo 10e8, 59n9	Az	160.0	165.4	170.3	173.9	177.4	180.9	184.3	187.9	193.5	198.1	224.9
	El	20.4	21.2	21.7	21.9	22.0	22.0	22.0	21.8	21.3	20.7	13.9
	Sk	-2.9	-0.3	2.1	-3.0	-1.3	0.5	2.2	3.9	6.8	9.0	20.8
Stavanger 5e8, 59n0	Az	154.3	159.6	164.4	168.1	171.6	175.0	178.5	182.1	187.9	192.5	220.0
	El	20.3	21.3	22.0	22.5	22.8	22.9	23.0	23.0	22.8	22.4	16.4
	Sk	-5.9	-3.4	-1.0	-6.1	-4.3	-2.5	-0.7	1.1	4.1	6.4	19.4
Trondheim 10e4, 63n6	Az	160.3	165.4	170.2	173.7	177.1	180.4	183.8	187.1	192.7	197.1	223.5
	El	16.7	17.4	17.8	18.0	18.1	18.1	18.1	18.0	17.6	17.1	11.3
	Sk	-1.7	0.6	2.6	-2.8	-1.3	0.2	1.7	3.2	5.6	7.5	17.8

Note

As for an area not stated in the table, you can visit to www.self-sat.com and find it from the column of Satellite finder under Customer service.

Sweden

Az = Azimuth El = Elevation Sk = Skew

		Astra 2A-2D	Astra 1E/3A	Astra 1F-1H/ 1KR/1L/ 1M	Eutelsat W2	Hotbird 6/7A/8	Eutelsat W1	Eutelsat W3A	Sirius 4	Thor 3/5 Intelsat 10-02	Atlantic bird 3	Hispasat 1C,1D
		28.2E	23.5 E	19.2E	16.0E	13.0W	10.0W	7.0E	5.0E	1.0W	5.0W	30.0 W
Malmö 13e0, 55n6	Az	161.8	167.3	172.5	176.4	180.0	183.6	190.9	187.3	196.8	201.5	228.5
	El	25.2	25.9	26.4	26.6	26.7	26.6	26.1	26.4	25.4	24.6	16.1
	Sk	-3.2	-0.1	2.8	-2.1	0.0	2.1	6.1	4.1	9.4	12.0	25.0
Norrköping 16e2, 58n6	Az	166.0	171.5	176.4	180.2	183.7	187.2	194.2	190.7	199.9	204.4	230.7
	El	22.6	23.1	23.4	23.5	23.4	23.2	22.6	23.0	21.8	21.0	12.7
	Sk	-0.3	2.6	5.1	0.1	2.0	3.8	7.4	5.6	10.2	12.5	23.8
Stockholm 18e1, 59n3	Az	168.3	173.7	178.7	182.4	185.9	189.4	194.1	192.8	201.9	206.4	232.3
	El	22.1	22.5	22.7	22.6	22.5	22.3	21.9	22.0	20.7	19.8	11.4
	Sk	1.0	3.8	6.3	1.3	3.0	4.8	7.2	6.5	11.0	13.1	23.8
Sundsväl 17e2, 62n4	Az	167.6	172.9	177.7	181.4	184.7	188.1	194.8	191.5	200.4	204.7	230.6
	El	18.8	19.2	19.4	19.4	19.3	19.2	18.6	18.9	17.8	17.1	9.8
	Sk	1.3	3.7	6.0	0.6	2.2	3.8	6.8	5.3	9.3	11.2	21.0
Umeå 21e2, 63n8	Az	172.2	177.4	182.2	185.8	189.1	192.4	199.0	195.7	204.5	208.7	234.2
	El	17.7	17.9	17.9	17.8	17.6	17.4	16.6	17.0	15.8	14.9	7.4
	Sk	3.6	5.9	8.0	2.6	4.0	5.5	8.3	6.9	10.5	12.3	21.0
Uppsala 17e6, 59n9	Az	167.8	173.2	178.2	181.9	185.4	188.8	195.6	192.2	201.3	205.7	231.7
	El	21.4	21.9	22.0	22.0	21.9	21.7	21.1	21.4	20.2	19.4	11.2
	Sk	0.9	3.6	6.1	0.9	2.7	4.4	7.8	6.1	10.5	12.6	23.2
Vasteras 16e5, 59n6	Az	166.5	171.9	176.9	180.6	184.1	187.6	194.4	191.0	200.1	204.6	230.7
	El	21.6	22.1	22.3	22.4	22.3	22.1	21.5	21.9	20.7	19.9	11.9
	Sk	0.2	2.9	5.4	0.3	2.1	3.8	7.2	5.5	10.0	12.1	23.1
Visby (Gotland) 18e3, 57n6	Az	168.3	173.9	178.9	182.7	186.3	189.8	196.8	193.3	202.5	207.0	233.0
	El	23.9	24.3	24.5	24.5	24.3	24.1	23.3	23.8	22.4	21.4	12.4
	Sk	0.8	3.7	6.4	1.5	3.4	5.2	8.9	7.1	11.9	14.1	25.4
Västervik 16e6, 57n7	Az	166.4	171.9	176.9	180.7	184.3	187.8	194.8	191.3	200.6	205.1	231.4
	El	23.6	24.1	24.4	24.4	24.3	24.1	23.5	23.9	22.6	21.7	13.1
	Sk	-0.2	2.7	5.4	0.4	2.3	4.2	7.9	6.0	10.8	13.1	24.7
Växjö 14e6, 56n9	Az	163.9	169.4	174.5	178.3	181.9	185.5	192.6	189.0	198.4	203.0	229.7
	El	24.1	24.8	25.1	25.2	25.2	25.1	24.6	24.9	23.8	23.0	14.5
	Sk	-1.7	1.2	4.0	-0.9	1.0	3.0	6.8	4.9	9.9	12.3	24.6
Örebro 15e1, 59n3	Az	164.8	170.3	175.2	178.9	182.4	185.9	193.3	189.4	198.5	203.0	229.4
	El	21.8	22.3	22.6	22.7	22.7	22.5	25.1	22.3	21.3	20.5	12.7
	Sk	0.7	2.0	4.6	-0.5	1.3	3.0	7.3	4.8	9.4	11.5	22.8
Östersund 14e7, 63n6	Az	165.0	170.2	175.0	178.5	181.9	185.2	191.9	188.6	197.4	201.8	227.9
	El	17.3	17.8	18.1	18.1	18.1	18.0	17.6	17.9	17.0	16.4	9.9
	Sk	0.4	2.7	4.8	-0.7	0.8	2.3	5.3	3.8	7.7	9.5	19.3
Malmö 13e0, 55n6	Az	161.8	167.3	172.5	176.4	180.0	183.6	190.9	187.3	196.8	201.5	228.5
	El	25.2	25.9	26.4	26.6	26.7	26.6	26.1	26.4	25.4	24.6	16.1
	Sk	-3.2	-0.1	2.8	-2.1	0.0	2.1	6.1	4.1	9.4	12.0	25.0
Norrköping 16e2, 58n6	Az	166.0	171.5	176.4	180.2	183.7	187.2	194.2	190.7	199.9	204.4	230.7
	El	22.6	23.1	23.4	23.5	23.4	23.2	22.6	23.0	21.8	21.0	12.7
	Sk	-0.3	2.6	5.1	0.1	2.0	3.8	7.4	5.6	10.2	12.5	23.8
Stockholm 18e1, 59n3	Az	168.3	173.7	178.7	182.4	185.9	189.4	194.1	192.8	201.9	206.4	232.3
	El	22.1	22.5	22.7	22.6	22.5	22.3	21.9	22.0	20.7	19.8	11.4
	Sk	1.0	3.8	6.3	1.3	3.0	4.8	7.2	6.5	11.0	13.1	23.8
Sundsväl 17e2, 62n4	Az	167.6	172.9	177.7	181.4	184.7	188.1	194.8	191.5	200.4	204.7	230.6
	El	18.8	19.2	19.4	19.4	19.3	19.2	18.6	18.9	17.8	17.1	9.8
	Sk	1.3	3.7	6.0	0.6	2.2	3.8	6.8	5.3	9.3	11.2	21.0
Umeå 21e2, 63n8	Az	172.2	177.4	182.2	185.8	189.1	192.4	199.0	195.7	204.5	208.7	234.2
	El	17.7	17.9	17.9	17.8	17.6	17.4	16.6	17.0	15.8	14.9	7.4
	Sk	3.6	5.9	8.0	2.6	4.0	5.5	8.3	6.9	10.5	12.3	21.0
Uppsala 17e6, 59n9	Az	167.8	173.2	178.2	181.9	185.4	188.8	195.6	192.2	201.3	205.7	231.7
	El	21.4	21.9	22.0	22.0	21.9	21.7	21.1	21.4	20.2	19.4	11.2
	Sk	0.9	3.6	6.1	0.9	2.7	4.4	7.8	6.1	10.5	12.6	23.2
Vasteras 16e5, 59n6	Az	166.5	171.9	176.9	180.6	184.1	187.6	194.4	191.0	200.1	204.6	230.7
	El	21.6	22.1	22.3	22.4	22.3	22.1	21.5	21.9	20.7	19.9	11.9
	Sk	0.2	2.9	5.4	0.3	2.1	3.8	7.2	5.5	10.0	12.1	23.1
Visby (Gotland) 18e3, 57n6	Az	168.3	173.9	178.9	182.7	186.3	189.8	196.8	193.3	202.5	207.0	233.0
	El	23.9	24.3	24.5	24.5	24.3	24.1	23.3	23.8	22.4	21.4	12.4
	Sk	0.8	3.7	6.4	1.5	3.4	5.2	8.9	7.1	11.9	14.1	25.4
Västervik 16e6, 57n7	Az	166.4	171.9	176.9	180.7	184.3	187.8	194.8	191.3	200.6	205.1	231.4
	El	23.6	24.1	24.4	24.4	24.3	24.1	23.5	23.9	22.6	21.7	13.1
	Sk	-0.2	2.7	5.4	0.4	2.3	4.2	7.9	6.0	10.8	13.1	24.7
Växjö 14e6, 56n9	Az	163.9	169.4	174.5	178.3	181.9	185.5	192.6	189.0	198.4	203.0	229.7
	El	24.1	24.8	25.1	25.2	25.2	25.1	24.6	24.9	23.8	23.0	14.5
	Sk	-1.7	1.2	4.0	-0.9	1.0	3.0	6.8	4.9	9.9	12.3	24.6
Örebro 15e1, 59n3	Az	164.8	170.3	175.2	178.9	182.4	185.9	193.3	189.4	198.5	203.0	229.4
	El	21.8	22.3	22.6	22.7	22.7	22.5	25.1	22.3	21.3	20.5	12.7
	Sk	0.7	2.0	4.6	-0.5	1.3	3.0	7.3	4.8	9.4	11.5	22.8
Östersund 14e7, 63n6	Az	165.0	170.2	175.0	178.5	181.9	185.2	191.9	188.6	197.4	201.8	227.9
	El	17.3	17.8	18.1	18.1	18.1	18.0	17.6	17.9	17.0	16.4	9.9
	Sk	0.4	2.7	4.8	-0.7	0.8	2.3	5.3	3.8	7.7	9.5	19.3

Note

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